



SERVICE LEARNING AS A CATALYST FOR SUSTAINABLE FASHION EDUCATION

Review paper
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Alenka Pavko Čuden^{1*}, Barbara Simončič^{1,a}, Matejka Bizjak^{1,b}

¹University of Ljubljana, Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia

*E-mail: alenka.cuden@ntf.uni-lj.si, ORCID ID: 0000-0002-9225-5128

^aE-mail: barbara.simoncic@ntf.uni-lj.si, ORCID ID: 0000-0002-6071-8829

^bE-mail: bizjak@ntf.uni-lj.si, ORCID ID: 0000-0003-0361-9784

ABSTRACT: *Integrating service learning (SL) projects into higher education fashion seminars is an effective pedagogical approach that combines academic learning with meaningful community engagement, offering students with transformative real-world experiences. Since gaining prominence in the early 2000s, SL has sought to enrich educational outcomes while addressing social challenges through practical application. This approach deepens students' understanding of theoretical concepts and fosters essential competencies such as creativity, empathy, and social responsibility, which are increasingly important in today's complex global context. In fashion education, SL is often implemented through projects where students design garments for underserved communities, addressing both industry-related challenges and broader societal issues, including sustainability and inclusivity. The growing recognition of SL's educational value has led to its inclusion in curricula at all levels, from primary education to postgraduate studies, promoting sustained collaboration between educational institutions and community partners. This study explores the integration of SL projects into higher education fashion courses, with a particular focus on sustainability within the textile, clothing, and fashion industry. It draws on a review of relevant literature, selected case studies, and an analysis of the potential of SL in fashion education. The findings indicate that well-designed SL projects enhance student engagement, support the development of critical thinking, promote ethical awareness, and contribute to community development. Despite its considerable potential, the implementation of service learning in fashion education faces challenges such as limited resources, time constraints, logistical complexities, the need to maintain academic rigour, and the requirement for meaningful community engagement. Nevertheless, service learning has significant capacity to empower students to become responsible professionals and advocates for positive change within the fashion sector.*

Keywords: *service learning, fashion education, sustainability, community development.*



SERVISNO UČENJE KAO KATALIZATOR ODRŽIVOG MODNOG OBRAZOVANJA

APSTRAKT: Integracija projekata servisnog učenja (SU) u visokoškolske modne seminare predstavlja efikasan pedagoški pristup koji povezuje akademsko učenje sa smislenim angažovanjem zajednice, pružajući studentima transformativna iskustva iz realnog okruženja. Od kada je steklo veću prepoznatljivost početkom 2000-ih godina, servisno učenje ima za cilj unapređenje obrazovnih ishoda uz istovremeno suočavanje sa društvenim izazovima kroz praktičnu primenu. Ovakav pristup produbljuje razumevanje teorijskih koncepata kod studenata i podstiče razvoj ključnih kompetencija, kao što su kreativnost, empatija i društvena odgovornost, koje su od sve većeg značaja u savremenom, složenom globalnom kontekstu. U modnom obrazovanju, servisno učenje se često realizuje kroz projekte u okviru kojih studenti dizajniraju odevne predmete za društveno marginalizovane zajednice, čime se istovremeno adresiraju izazovi modne industrije i šira društvena pitanja, uključujući održivost i inkluzivnost. Sve veće prepoznavanje obrazovne vrednosti servisnog učenja dovelo je do njegovog uključivanja u nastavne planove i programe na svim nivoima obrazovanja, od osnovnog do postdiplomskih studija, čime se podstiče dugoročna saradnja između obrazovnih institucija i partnera iz zajednice. Ova studija razmatra integraciju projekata servisnog učenja u visokoškolske studentske programe iz oblasti mode, sa posebnim fokusom na održivost u tekstilnoj, odevnoj i modnoj industriji. Zasniva se na pregledu relevantne literature, odabranim studijama slučaja i analizi potencijala servisnog učenja u modnom obrazovanju. Rezultati ukazuju na to da dobro osmišljeni projekti servisnog učenja povećavaju angažovanost studenata, podstiču razvoj kritičkog mišljenja, unapređuju etičku svest i doprinose razvoju zajednice. Uprkos značajnom potencijalu, primena servisnog učenja u modnom obrazovanju suočava se sa izazovima kao što su ograničeni resursi, vremenska ograničenja, logističke složenosti, potreba za očuvanjem akademske rigoroznosti i zahtev za smislenim uključivanjem zajednice. Ipak, servisno učenje ima značajan kapacitet da osnaži studente da postanu odgovorni profesionalci i zagovornici pozitivnih promena u modnom sektoru.

Ključne reči: servisno učenje, modno obrazovanje, održivost, razvoj zajednice.

1. INTRODUCTION

The term sustainability has become a defining concept since the 1990s, promising balance and continuity in a world often characterised by instability and rapid change. The rise of the sustainability movement is particularly compelling, as it offers a holistic response to environmental challenges by linking nature, culture, values, power relations, and technology. However, sustainability does not represent a single unified approach; instead, it encompasses diverse perspectives and practices shaped by different communities and interests. It operates at multiple levels, from global policymaking and environmental expertise to grassroots initiatives, including social, environmental movements, indigenous knowledge systems, and locally driven efforts to transform communities [1]. According to

the World Commission on Environment and Development, sustainability is defined as „development that meets the needs of the present without compromising the ability of future generations to meet their needs“. The concept has since evolved into the „Triple Bottom Line“, encompassing social, environmental and economic performance [2, 3].

In the textile and clothing sector, sustainability is particularly pressing, as products have environmental impacts at every stage of their lifecycle. In recent years, growing awareness of the fashion industry’s environmental and social consequences has led to an increase in sustainability initiatives [4].

Fashion is a dynamic and ever-evolving concept, yet its fundamental meaning endures. It serves as a form of cultural expression, closely linked to identity, social status, and interpersonal relationships. Although often regarded as transient and superficial, change – an essential attribute of fashion – is not inherently positive or negative; its impact depends on its nature. In contrast, sustainability is based on a long-term perspective. Fashion can involve discarding fully functional garments for symbolic or semiotic reasons, which contributes to significant waste at the end-use stage and therefore appears to conflict with sustainability goals [4].



Figure 1: Discarded knitwear waste resulting from fast fashion and excessive consumerism

From the consumer perspective, awareness of social and environmental issues is increasing. Environmental attitudes significantly influence eco-fashion consumption, and studies indicate that consumers are willing to purchase sustainable fashion products and even pay higher prices, provided quality expectations are met [4]. However, knowledge of sustainability within the fashion sector, although improving, remains limited and is often shaped by popular narratives rather than critical understanding. This reflects and perpetuates the tendency to view fashion as „an immoral, self-indulgent industry... that lacks gravitas and a strong conceptual framework” [5].

For sustainability to become fully embedded in the fashion sector, more comprehensive communication and education are required to develop ecological literacy and an



understanding of the interconnections between natural and human systems. Designers play a crucial role in articulating new visions of sustainable fashion, providing tools, practices, and narratives that can foster collective change. Such communication may extend beyond traditional visual forms and classroom settings, taking shape through experimental practices such as prototype business models, artefacts, services, workshops, and participatory initiatives [6].

In this context, integrating innovative teaching methods into fashion education offers significant potential. By reshaping design thinking and conceptual approaches among emerging designers, these methods may help transform production practices and, indirectly, consumers' attitudes towards sustainability. New teaching methods in sustainable fashion design at all levels of education aim to pass on knowledge and cultivate responsible, informed consumers within the fashion industry, reflecting a growing recognition of the urgent need for sustainability in global textile practices.

2. INNOVATIVE APPROACHES TO TEACHING SUSTAINABILITY CONCEPTS IN FASHION

Innovative teaching methods in fashion design education increasingly focus on experiential, participatory, and research-led approaches that prioritise sustainability. Classroom and studio-based teaching is complemented by interdisciplinary collaboration, design thinking, and practice-based experimentation, enabling students to critically engage with the environmental and social implications of textile and fashion design decisions. Methods such as material and process exploration and evaluation, universal design, adaptive design, design for longevity, upcycling, zero-waste pattern cutting, and concepts such as product-service systems, including rental and repair, encourage students to reconsider the sustainability of conventional materials, production processes, and consumption models [5, 7, 8].

Project-based engagement with real-world stakeholders, such as local communities, industry partners, non-profit organisations, and circular economy initiatives, can foster a reflective understanding of sustainability as both a design challenge and a cultural and social engagement practice. Such pedagogical approaches promote technical competence, ethical awareness, and critical thinking, equipping emerging designers to articulate alternative visions of fashion.

Contemporary fashion education increasingly emphasises communication at all levels as a key design outcome, enabling knowledge transfer from designers to consumers. Through methods such as co-design, interactive workshops, collaborative projects, and digital platforms, students are trained to engage consumers as active participants in sustainable practices rather than passive recipients of products [6, 7].

By developing textile and clothing products, services, and narratives that reveal the lifecycle, value, and meaning of textiles and clothing, designers can influence consumer attitudes and behaviours. In this way, novel teaching approaches help form a new generation of designers who create sustainable fashion and communicate its significance effectively, thereby fostering more informed and responsible consumption patterns.



As environmental awareness grows, educational institutions are innovating their curricula by integrating principles of sustainable development, ethical design, and responsible production. Controversies surrounding sustainable fashion education often focus on the challenge of reconciling economic viability with sustainable practices. Many educational frameworks struggle to shift entrenched industry mindsets, where sustainability is sometimes regarded as a marketing tool rather than a foundational principle. This highlights the need for genuine commitment to sustainability within both educational settings and the fashion industry, preparing students to confront the status quo and drive meaningful change. Educators can play an activist role, although the fashion education system can be challenging as a medium for large-scale change. As educators continue to adapt curricula to reflect these dynamics, the potential for sustainable fashion education to shape a more ethical and environmentally responsible industry becomes increasingly clear [9-11].

Educational institutions and teachers must act as agents of change and are crucial in initiating transformation and implementing new teaching methods aligned with contemporary developments.

3. SERVICE LEARNING AS A CONCEPT SUPPORTING SOCIETAL WELL - BEING IN SUSTAINABILITY

3.1. Service-learning approach

Service learning is an innovative and impactful educational approach that has gained considerable momentum in recent years. Serving as a bridge between academic learning and community service, service learning enables students to translate their theoretical knowledge to practical solutions for real-world problems, while simultaneously developing their skills and understanding. The multi-dimensional benefits of service learning are extensive, significantly contributing to students, teachers, communities, and policy-makers in education [12].

Although the concept of service learning has historical roots, tracing back to John Dewey's philosophy of experiential learning, it was not until the 1980s that it was defined as a distinct pedagogical approach. Initially, it focused primarily on volunteering and community service, emphasising service over academic learning. This approach often took place in informal settings, such as campus organisations or community clubs, where students participated in service activities without structured educational objectives. Today, service learning is embraced by many educational institutions worldwide, shaping the curricula of thousands of schools, colleges, and universities [12, 13].

3.2. Benefits and predicament of service-learning

There are many proven benefits of incorporating service learning into the curriculum for all participants.

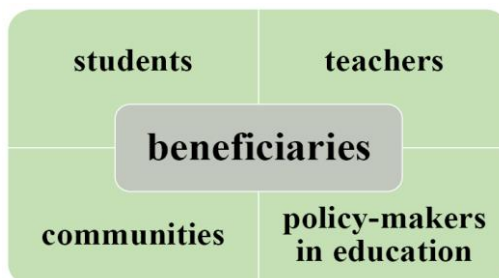


Figure 2: Key beneficiaries of service-learning integration

Students benefit through:

- improved communication and leadership skills, increased self-awareness, and greater knowledge of community needs and local or global issues,
- stronger connections between academic subjects through an interdisciplinary approach,
- enhanced problem-solving ability and real-life skills,
- strengthened class group communication,
- increased empathy and responsibility,
- deeper critical thinking skills [14].

Teachers are provided with:

- an innovative pedagogical approach that aligns academic learning with real-world applications, making the learning process more engaging and relevant,
- a collaborative learning environment that enhances teacher-student relationships and creates a more dynamic, inclusive classroom,
- professional development opportunities through the acquisition of new skills and methodologies,
- a sense of fulfilment from contributing to societal change [12].

Communities receive:

- support from students, who bring fresh perspectives, unique skills, and innovative knowledge,
- recognition of community needs, including education, health, environmental conservation, and social justice [12].

Policy-makers in education benefit from:

- the effectiveness of experiential learning, which incorporates best practices into curricula,
- the achievement of educational policy goals, such as improving student outcomes, fostering civic responsibility, and promoting community engagement,
- partnerships between educational institutions and community organisations, aligning school objectives with community needs promoting holistic societal development [12].

While implementing the service-learning concept at all levels of education offers substantial benefits for students, teachers, the community, and policy-makers, successful integration requires addressing the associated predicaments and challenges. Unclear



definitions of roles and expectations among students, teachers, and community partners can result in mismatches between intended and actual outcomes.

The greatest obstacles to incorporating service into coursework are:

- time pressures and inflexible teaching loads,
- resistance to curricular changes, including the obligation to complement existing curriculum requirements while meeting educational goals,
- lack of support for educational institutions at the institutional level,
- lack of resources such as budget and funding, insufficient teaching materials, and staff shortages [15].

Despite increasing recognition of the service-learning approach across disciplines, its application in sustainable textile, clothing, and fashion education remains underexplored. Most existing research focuses on fields such as business, engineering, and health sciences, overlooking the unique combination of creative, technical, cultural, and ethical dimensions in fashion education. This gap is particularly significant given the industry's urgent sustainability and social responsibility challenges.

4. SERVICE LEARNING IN TEXTILES, CLOTHING AND FASHION: CASE STUDIES

4.1. African Happy Pants™ product range expansion

The service-learning project conducted by Strydom and Tslepis [16] at the University of Pretoria centred on a partnership between a university department and a social entrepreneur to address real-world product development needs in the apparel sector. The main objective was to expand and improve an existing clothing product range, African Happy Pants™, while exposing final-year clothing management students to the realities of apparel product development. Through this collaboration, students applied the design process to develop new prototypes, bridging a skills gap in the community partner organisation, which lacked design expertise. The project content was more technical in nature than related to sustainable fashion.

The outcomes demonstrated clear mutual benefits. Students provided tangible design solutions that enhanced the partner's product offerings, while gaining hands-on experience with real clients and production constraints. Reported benefits for students included the development of higher-order cognitive skills such as critical thinking, design, analysis, synthesis, and evaluation, as well as the ability to apply theoretical and practical knowledge in authentic contexts. Students also acquired valuable work-related competencies and practical experience, highlighting how service-learning can strengthen professional readiness and deepen understanding through real-world engagement.

4.2 Reusable food bags

Hwang et al. [17] conducted a collaborative service-learning project within fashion and textile education, with the primary objective of understanding how such experiences influence student learning. Specifically, the study aimed to:

- explore students' learning experiences in a collaborative service-learning context,
- analyse how factors such as service-learning engagement, civic responsibility, and



- enjoyment contribute to students' academic development, and
- propose a broader framework for integrating social responsibility initiatives into multi-course fashion curricula.

As part of the project, fashion students created reusable food bags for a local community action food bank. In the textiles course, they learned about various textile materials, their properties, end uses, and care methods. Drawing on this knowledge, they sourced post-consumer textile waste containing fabrics durable enough to hold the weight of cans and dry goods. Textiles sourced from family, friends, charity shops, and past student projects included drapes, tablecloths, trousers, and fabric scraps. The project brought students into collaboration with community partners, combining academic content with real-world problem-solving and social engagement. The project content was sustainable, but it was not related to fashion products.

Students' academic development was positively influenced not only by knowledge acquisition but also by affective factors such as enjoyment, a sense of civic responsibility, and engagement with the service experience. Reported benefits for students included enhanced understanding of course material, increased motivation, and the development of social awareness and responsibility. Such projects can strengthen students' holistic learning by connecting disciplinary knowledge with meaningful community interaction, while also providing a structured approach to embedding social responsibility in fashion education.

4.3. Upcycling fashion for seniors

Chae [18] reported on a service-learning project that integrated a semester-long community engagement experience into a capstone fashion design course. The main objectives were:

- to collect qualitative data on the clothing needs of senior citizens through direct interaction,
- to apply and test the design process using the Functional–Expressive–Aesthetic (FEA) framework, and
- to develop upcycled garment prototypes that are functional and appealing while addressing actual user needs.

Through one-to-one collaboration with seniors living in a community housing facility, students participated in a real-world design context that emphasised empathy, sustainability through upcycling, and user-centred design practices. The project content was strongly sustainability-oriented, but focused more on functionality than fashion.

The project outcomes demonstrate mutual benefits for all participants. Students and seniors worked together positively, resulting in clothing solutions that better reflected the needs and preferences of older adults while providing affordable, upcycled garments. The project effectively linked academic learning with community impact, strengthened relationships between the university and the local community, and generated tangible design outputs.

For students, the experience enhanced their ability to work with real clients, particularly those outside their usual interests or comfort zones, and helped them articulate and apply their design knowledge in practical settings. Reported benefits for students include improved communication with clients, a deeper understanding of user-centred design, increased confidence, and expanded professional and interpersonal skills through hands-

on, collaborative experience.

4.4. Sustainable fashion walk in Ljubljana

The Erasmus+ TexUnite project [19] promotes the key competences required to achieve sustainability goals by introducing service learning into textile, clothing, and fashion education through project-based seminars. The project develops an online educational seminar for higher education, featuring digitally enhanced teaching and learning formats for implementing sustainability-oriented service learning project seminars with external partners. The virtual exchange method facilitates intercultural exchange among the six European partner universities.



Figure 3: Map of the Sustainable Fashion Walk in the Ljubljana guide

One of the service learning projects, conducted by the University of Ljubljana, focused on providing sustainable fashion products. The goals of the project were:

- educating students about the principles of sustainability, including the key objectives of the EU Textile Strategy for Sustainable and Circular Textiles,
- introducing students to the latest sustainable clothing technologies and zero-waste practices,
- promoting a mindset that values sustainability as an integral part of the fashion and textile industry, and encouraging students to prioritise environmental and ethical



considerations in their future careers,

- creating a map of sustainable fashion in Ljubljana with shopping tips that promote sustainability, and sharing the map on social networks to promote the values of sustainable behaviour in relation to fashion.

A third - year Textile and Fashion Design Programme student from the Clothing Technology Support course took part in the project.

5. CONCLUSIONS

Service learning is a powerful pedagogical innovation in textile, clothing, and fashion education, addressing the need to prepare students for professional practice while fostering civic responsibility and social consciousness. Evidence from reported case studies shows that well-designed service learning projects enhance technical competencies, interpersonal skills, and ethical awareness, while providing tangible benefits to community partners. Success depends on reciprocity, structured reflection, institutional support, and comprehensive assessment.

Integrating sustainability into textile, clothing, and fashion education is essential for preparing future designers to address the industry's pressing environmental challenges. Embedding sustainability practices into the curriculum from an early stage fosters lasting habits and informed consumer choices among students.

As the fashion industry faces urgent sustainability and social responsibility challenges, service learning offers a pathway to educate change agents with both professional expertise and a commitment to community benefit. Future research should examine longitudinal outcomes, the comparative effectiveness of different implementation models, and strategies for scaling service learning across fashion curricula.

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